# SUNPOWER

# E19 / 318 SOLAR PANEL

MAXIMUM EFFICIENCY AND PERFORMANCE

### **BENEFITS**

## **Highest Efficiency**

SunPower<sup>TM</sup> Solar Panels are the most efficient photovoltaic panels on the market today.

#### **More Power**

Our panels produce more power in the same amount of space—up to 50% more than conventional designs and 100% more than thin film solar panels.

#### **Reduced Installation Cost**

More power per panel means fewer panels per install. This saves both time and money.

#### Reliable and Robust Design

Proven materials, tempered front glass, and a sturdy anodised frame allow panel to operate reliably in multiple mounting configurations.



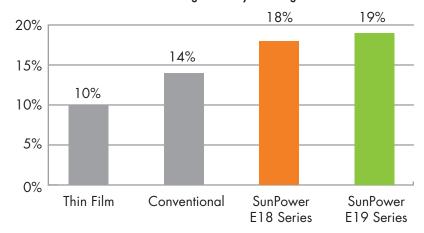




## The planet's most powerful solar panel.

The SunPower<sup>™</sup> 318 Solar Panel provides today's highest efficiency and performance. Utilising 96 back-contact solar cells, the SunPower 318 delivers a total panel conversion efficiency of 19.5%. The 318 panel's reduced voltage-temperature coefficient, anti-reflective glass and exceptional low-light performance attributes provide outstanding energy delivery per peak power watt.

#### SunPower's High Efficiency Advantage











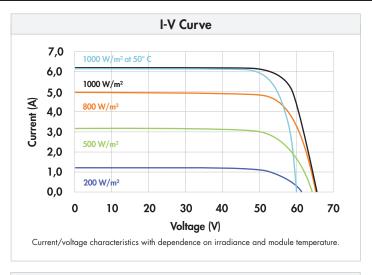
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Electrical Data  Measured at Standard Test Conditions (STC): Irradiance 1000W/m², AM 1.5, and cell temperature 25° C				
Nominal Power (+5/-3%)	P <sub>nom</sub>	318 W		
Efficiency	η	19.5 %		
Rated Voltage	V <sub>mpp</sub>	54.7 V		
Rated Current	I <sub>mpp</sub>	5.82 A		
Open Circuit Voltage	V <sub>oc</sub>	64.7 V		
Short Circuit Current	I <sub>sc</sub>	6.20 A		
Maximum System Voltage	IEC	1000 V		
Temperature Coefficients	Power (P)	-0.38% / K		
	Voltage (V <sub>oc</sub> )	-176.6mV / K		
	Current (I <sub>sc</sub> )	3.5mA / K		
NOCT		45° C +/-2° C		
Series Fuse Rating		15 A		
Limiting Reverse Current (3-strings)	I <sub>R</sub>	15.5 A		

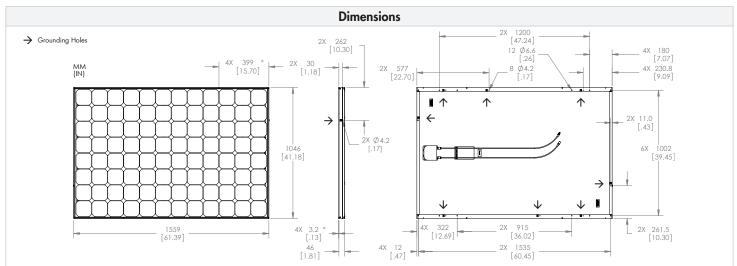
Electrical Data  Measured at Nominal Operating Cell Temperature (NOCT): Irradiance 800W/m², 20° C, wind 1 m/s			
Nominal Power	$P_{nom}$	236 W	
Rated Voltage	$V_{mpp}$	50.4 V	
Rated Current	I <sub>mpp</sub>	4.69 A	
Open Circuit Voltage	V <sub>oc</sub>	60.6 V	
Short Circuit Current	I <sub>sc</sub>	5.02 A	



Tested Operating Conditions		
Temperature	-40° C to +85° C	
Max load	550 kg / m² (5400 Pa), front (e.g. snow) w / specified mounting configurations	
	245 kg / $\mbox{m}^{2}$ (2400 Pa) front and back - e.g. wind	
Impact Resistance	Hail – 25 mm at 23 m/s	

Warranties and Certifications		
Warranties 25 year limited power warranty		
	10 year limited product warranty	
Certifications	IEC 61215 Ed. 2, IEC 61730 (SCII)	

Mechanical Data						
Solar Cells	96 SunPower all-back contact monocrystalline	Output Cables	1000mm length cables / MultiContact (MC4) connectors			
Front Glass	High transmission tempered glass with anti-reflective (AR) coating	E	Anodised aluminium alloy type 6063 (black)			
Junction Box	IP-65 rated with 3 bypass diodes	Frame				
32 x 155 x 128 (mm)	Weight	18.6 kg				



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.